2017 Second Quarter Mining Report

Facility Name: Poly Met Mining, Inc. (PolyMet) NorthMet Mining Project

Current Actions: 1) NPDES/SDS permit (Draft NPDES/SDS Permit No. MN0071013)

2) Part 70 air emission permit (Draft Permit No. 13700345-001)

3) 401 Certification (Draft Certification No. 1999-5528-JKA)

4) Construction Stormwater General Permit Coverage

Project Supervisor Ann Foss, Richard Clark, Suzanne Baumann, Jeff Stollenwerk

Project Manager: Jim Robin (WQ), Eric Alms (AQ)

Lead Staff: Hassan Bouchareb (AQ), Stephanie Handeland (WQ), Jen Oknich (401

Certification)

Lead Agencies: MPCA

Accomplishments during this reporting period:

General

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Air Quality

- MPCA completed its review of PolyMet's Air Emissions Risk Analysis (AERA) modeling. MPCA
 concluded that PolyMet's modeling was accurate and risk estimates do not exceed facility
 risk guideline values.
- MPCA continues to review the other air modeling reports and elements of the permit application.
- · Water Quality
 - MPCA continues to review PolyMet's NPDES/SDS water quality permit application. Work is
 ongoing in the areas of antidegradation, permit monitoring and limitations, and other
 permit requirements. MPCA continues to maintain routine conversations with EPA during
 the review process.

401 Certification

 MPCA staff have been having ongoing meetings with wetland and stream hydrology staff at the United States Army Corps of Engineers (USACE) and Minnesota Department of Natural Resources (MDNR) to develop draft permit conditions.

- MPCA will continue to review the permitting and certification applications.
- MPCA will continue send out quarterly messages summarizing activities and documents added to the project website in the previous quarter.
- MPCA will continue to update the agency's project web site with permit-related information that
 may be of interest to the general public and send at least quarterly updates to the email
 subscription list.

Facility Name: US Steel (USS) - Minntac

Current actions: 1) Water quality permit reissuance (NPDES/SDS Permit No. MN0057207) for the

tailings basin

2) Multi-media Schedule of Compliance (SOC)

Project Supervisor: Suzanne Baumann

Project Manager: Steve Sommer

Lead Staff: Erik Smith (WQ), John Thomas (WQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

 A draft NPDES/SDS permit for the tailings basin was on public notice from November 15 to December 23, 2016.

- During the comment period, MPCA received roughly 18 unique comment letters, over 1000 form letters, two contested case hearing requests (USS and MCEA), and a variance request (USS).
- MPCA is evaluating the contested case hearing and variance requests and working on response to comments.

- Continue to evaluate comments and contested case hearing requests received on the draft NPDES/SDS permit for the tailings basin.
- Ongoing implementation of the groundwater Sulfate Reduction Plan at monitoring well GW 012.

Facility Name: Cliffs Erie LLC – Hoyt Lakes Mining Area and Tailings Basin Area

Current actions: Reissuance of combined water quality permits (NPDES/SDS Permit Nos.

MN0042536 and MN0054089)

Project Supervisor: Ann Foss

Project Manager: Jim Robin

Lead Staff: Richard Clark, Stephanie Handeland

Lead Agency: MPCA

Accomplishments during this reporting period:

 Continued discussions with the company to acquire necessary information for permitting and to assure continued progress on Consent Decree requirements.

- Continue limited internal discussion with the goal of refining the permitting approach and continuing progress on the schedules for the various mining areas/discharges.
- Continue technical review of the updated long-term mitigation plans with follow-up discussions with Cliffs Erie as needed.

Facility Name: Northshore Mining Company

Current actions: 1) Water quality permit reissuance for Silver Bay Plant and Mile Post 7 (MP7)

Tailings Basin (NPDES/SDS Permit No. MN0055301)

2) Air permit major amendment application from Northshore to change how

fibers are regulated (Draft Air Emission Permit No. 07500003-101)

Project Supervisor: Jeff Udd (WQ)

Suzanne Baumann (AQ)

Project Manager: None

Lead Staff: Brandon Smith (WQ reissuance of plant site permit)

Lead Agency: MPCA for AQ and WQ Permits

Accomplishments during this reporting period:

 Continued to consider feedback received from the MPCA Advisory Committee and others on the MPCA's proposal to change how fibers are regulated at Northshore.

- Staff are evaluating pre-public notice feedback on the NPDES/SDS permit.
- Continue work on the fiber permit language for inclusion in a future major amendment, which
 includes providing the draft permit to tribal governments and the company prior to a public notice
 period.

Facility Name: ERP Iron Ore Plant 1 formerly Magnetation Plant 1

Current Actions: 1) Water quality permit reissuance (SDS Permit No. MN0069221)

2) Air quality initial permit issuance (Draft Permit No. 06100076-001)

Project Supervisor: Suzanne Baumann

Project Manager: None

Lead Staff: Erik Smith (WQ), Ben Wenkel (AQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

• No MPCA activity during this reporting period.

Plans for next reporting period:

• None at this time.

Facility Name: Mining Resources, LLC

Current Actions: 1) Air quality initial permit issuance (Draft Permit No. 13700341-001)

2) Water quality permit reissuance (SDS Permit No. MN0070050)

Project Supervisor: Suzanne Baumann

Project Manager: None

Lead Staff: Sarah Seelen (AQ), Stephanie Handeland (WQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

• No activity during this reporting period.

- The MPCA will continue working on a draft air quality permit, as time allows.
- Begin work on draft water quality permit.

Facility Name: Mesabi Metallics Company LLC (Mesabi Metallics)/Essar Steel Minnesota

Current Actions: 1) Part 70 permit reissuance and major amendment for final engineering

updates (Draft Permit No. 06100067-005)

2) Water quality permit reissuance (NPDES/SDS permit MN0068241)

Project Supervisor: Suzanne Baumann

Project Manager: None

Lead Staff: Ben Wenkel (AQ)

Lead Agency: MPCA

Accomplishments during this reporting period:

 MPCA continues to review the other air modeling reports and elements of the air permit application.

MPCA deemed the water quality permit reissuance application (NPDES/SDS permit MN0068241)
 complete on June 28, 2017.

Plans for next reporting period:

• Continue to review the other air modeling reports and elements of the air permit application.

MAJOR PERMIT APPLICATIONS RECEIVED THIS QUARTER

• No major permit applications were received during this quarter.

COMPLETED MINING PROJECTS

Project Name: United Taconite LLC - Fairlane Plant Moderate Air Quality Permit Amendment

Completed: Moderate air quality permit amendment for higher flux pellet production was

issued January 9, 2017 (Permit No. 13700113-007)

Lead Staff: Hassan Bouchareb

------Project Name: Mag

Mining LLC Plant 4 - Initial Air Quality Permit Issuance

Completed: Part 70 major air quality permit was issued March 15, 2016 (Permit No.

06100079-001)

Lead Staff: Sarah Seelen

Project Name: Magnetation Plant 2 Water Permit

Completed: Water quality permit reissued on October 10, 2015

Project Coordinator: Suzanne Baumann

Lead Staff: Erik Smith, Ben Underhill

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Project Name: US Steel – Keetac – Water Quality Permit Modification

Completed: Water quality permit modification to modify turbidity limits (NPDES/SDS Permit

No. MN0031879) was issued on September 4, 2015, with an effective date of

October 1, 2015

Lead Staff: Brandon Smith

Project Name: Magnetation Plant 2 – Initial Air Quality Permit Issuance

Completed: Part 70 major air quality permit was issued August 18, 2015 (Permit No.

06100078-001)

Lead Staff: Hassan Bouchareb

Project Name: United Taconite – Wet to Dry Particulate Control Change and Modify Scrubber

Solids Wasting Requirements

Completed: Major air permit amendment to replace 22 wet scrubbers with baghouses that

control particulate emissions from material handling operations and modify the scrubber solids wasting requirements. Issued on May 19, 2015 (Permit No.

13700113-006).

Lead Staff: Owen Seltz

Project Name: Hibbing Taconite Company – Wet to Dry Particulate Control Change and

Modify Scrubber Solids Wasting Requirements

Completed: Air permit major modification (Permit No. 1370006-007) to update GP 019: In-

Pit Crushing and Cobbing (IPCC) for increased flexibility. Issued on June 1, 2015.

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Lead Staff: Sarah Seelen

Project Name: Northshore Mining Company – Material Handling Equipment Project

Completed: Moderate air permit amendment to install additional material handling

equipment in the finished pellet yard was issued on February 5, 2015 (Permit

No. 07500003-010).

Lead Staff: Cindy Schafer

Project Name: Northshore Mining Company – Low NOx Burner Project

Completed: Major air permit amendment was issued on January 26, 2015 for the installation

of low NOx burners (Permit No. 07500003-009).

Lead Staff: Hassan Bouchareb
